

3.15 SOCIAL IMPACTS

3.15.1 Studies and Coordination

Applicable plans and policies were obtained from each of the affected jurisdictions in the study area for the purpose of characterizing study area cities. Descriptions were developed of each jurisdiction in the affected area based mainly on comprehensive plan information. In some cases, follow-up communication occurred with individual jurisdictions to obtain supplemental descriptions or to clarify existing information. Noise, visual, traffic, land use, and displacement impacts were all determined in separate analyses reported in this EIS.

The I-405 Corridor Program alternatives were evaluated for compliance with Executive Order 12898, which requires that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations,” as well as with the corresponding U.S. Department of Transportation Order 5610.2 and the FHWA Order 6640.23. The analysis concluded that no high and adverse human health or environmental effects of the project are expected to fall disproportionately on minority or low-income populations. The program is therefore consistent with the policy established in EO 12898 and FHWA Order 6640.23. The analysis is documented in the *I-405 Corridor Program Draft Environmental Justice Expertise Report* (CH2M HILL, 2001a) herein incorporated by reference, and is summarized in Appendix G (Environmental Justice) of this EIS.

3.15.2 Methodology

The social impacts analysis assesses the potential impacts of the alternatives and their major elements on community cohesion and social interaction. Community cohesion refers to a community’s ability to function and be recognized as a singular unit; social interaction refers to accessibility within and around the neighborhood.

The impact assessment was performed through inspections of the locations of proposed transportation improvements compared with neighborhood locations, and reviews of other discipline studies conducted for the I-405 Corridor Program, specifically displacements, land use, traffic and transportation, noise, and visual/aesthetics. Results from these analyses were broken down geographically by city as well as by major element (within the alternatives) and given values based on the severity of the impacts and their physical relationship to the city using best professional judgement.

The cumulative effects of these impacts on jurisdictions as a whole would depend on the location and severity of the all impacts. For example, a high increase in traffic on I-405 (and the noise and visual impacts that may accompany it) may have a low overall social effect if that section of I-405 is located on the fringes of existing neighborhoods. Conversely, a moderate increase in traffic and noise on a neighborhood arterial could cumulatively have a higher social impact due to multiple environmental effects and the physical barrier that the improved road could represent. Substantial social impacts are judged to occur if a combination of environmental effects has more than a moderate impact on community cohesion. This would happen if displacements, land use changes, and additional traffic created severe physical or implied separation between major neighborhood components. It would also occur if noise and visual impacts were severe enough to

impair community character to the point that the community could not function as a unified entity. Substantial impacts to social interaction would occur if increases in neighborhood traffic or if the scale of physical improvements to roadways prevented neighborhood residents from efficient inter- and intra-neighborhood movement, thereby severely impacting travel patterns and accessibility.

The analyses in this section are based on the *I-405 Corridor Program Draft Social Expertise Report* (CH2M HILL, 2001) herein incorporated by reference.

3.15.3 Affected Environment

3.15.3.1 Bothell

The city of Bothell is located northeast of Seattle and lies within both King and Snohomish counties. The city covers roughly 12 square miles and supports a population of about 28,350. Bothell is home to large employers such as Microsoft and PRECOR, and sustains a healthy environment for high-tech businesses and retail. It is also home to the University of Washington Bothell Branch Campus/Cascadia Community College. The median household income in 1997 was \$58,800, and in 1999 the city contained approximately 6,439 single-family residences and 3,305 multi-family residences.

There are many well-established neighborhoods along I-405, SR 522, and the Bothell-Everett Highway. Each neighborhood has a subarea plan that describes the intended land uses and expectations for future uses.

I-405 runs diagonally from the southeast corner to the northwest corner of Bothell. I-405 acts as a line separating neighborhoods to the east and west of the interstate. Along the southeast portion of I-405, neighborhoods have planned for higher densities, from 11 to 15 residential units per acre, intermixed with areas of Office-Professional, Neighborhood Business, and Community Business. Further north, higher densities are discouraged to preserve the distinct character provided by single-family residences.

In the I-405/Bothell-Everett Highway (Mill Creek) interchange area, the single-family neighborhoods are mostly concentrated to the east and north of I-405, with more intensive multi-family uses (up to 11 to 15 units per acre) to the west and south of the Interstate.

The Bothell-Everett Highway connects the northern segment of I-405 and north Bothell to the Bothell central business district (CBD). The predominant uses around the highway are Office-Professional, Community Business, General Community, and high-density residential areas (from 5 to 15 units per acre). Some of the areas are not yet developed, but are zoned for high-density residential use. Near the city center, the highway passes through the center of established high-density residential uses. As the highway progresses northward, it becomes a dividing line for different land uses.

Along SR 522, which connects the Bothell CBD to I-405 near the eastern border of the city, Office-Professional, General Commercial, some Light Industrial (closer to I-405), High-Density Residential (11 to 15 units per acre), and Open Space uses are all intermingled. The residential areas along SR 522 are smaller in general and distinctly clustered either to the north or south of the highway. The high-density developments serve as buffers to well-established lower-density areas (2 to 5 units per acre) which lie further north and south of SR 522.

3.15.3.2 Kenmore

Kenmore is located along the northern shore of Lake Washington and encompasses 6.1 square miles. Although Kenmore is a relatively new city, incorporated in 1998, its population has grown steadily to roughly 16,890 people in 2000. Kenmore has mostly a service-oriented economy, with major employers such as Bastyr University and Kenmore Air Harbor.

Kenmore is comprised of well established neighborhoods. The 1997 median annual household income in Kenmore was \$66,900. This area is fairly affluent and has nearly three times more single-family homes than multi-family homes, approximately 5,523 units and 1,549 units, respectively.

The city of Kenmore is divided into two distinct north and south sections by SR 522. SR 522 connects the Kenmore CBD to I-405, a few miles to the east. Most of the property along SR 522 and in central Kenmore is zoned Regional Business and Industrial. Towards the eastern and western points of the city along SR 522, the area's zones range from Residential-4 (4 units per acre), to Residential-24 (24 units per acre and up to 36 units per acre with added density bonuses). With few exceptions, most of the residential areas are already developed and established on either side of SR 522.

3.15.3.3 Woodinville

The city of Woodinville is located in north central King County, north of Redmond and east of Kirkland. SR 202 is the main road through the Sammamish Valley and runs from southwest Woodinville to Redmond. The other main highway through Woodinville is SR 522, which passes through the northwest corner of the city towards Monroe. The SR 522/I-405 interchange is approximately 1.5 miles to the west of the Woodinville CBD.

Woodinville is a relatively new city (incorporated in 1993) that is very much like a microcosm of the Puget Sound area. Agriculture, commerce, and industry flourish on the valley floor and residential neighborhoods decorate the valley sides and adjacent plateaus. The population of Woodinville in 2000 is estimated to be 10,280, and the median household income in 1997 was \$72,000. In 1999 there were approximately 2,459 single-family residences and 1,885 multi-family residences within the city.

Neighborhoods in Woodinville are naturally delineated by the geographical features in the area. Much of Woodinville has a rural atmosphere, but downtown Woodinville is rapidly developing into a cohesive, pedestrian-oriented retail area with nearby higher-density residential development and light industrial areas. Woodinville plans to develop a strong Urban Center character.

The areas near the major transportation corridors differ in their uses. SR 522 serves as a defining boundary between General Business, Industrial, and Residential areas. Residential areas to the west of SR 522 are well-established, and are tied into the development continuing in the city of Bothell to the west. Along SR 202, industrial activities are the main focus. Outlying these areas are medium-density residential neighborhoods. SR 202 also serves as a south gateway into the city with tourist attractions provided by the wineries, brewery, and hotel in the "tourist district" along the Sammamish River.

3.15.3.4 Redmond

The city of Redmond encompasses just over 16 square miles. The city borders the city of Kirkland on the west and an unincorporated section of the Sammamish Plateau on the east. SR 520 runs from the southwest corner to the city's CBD. Redmond supports a population of 44,020, which has increased 254 percent from 1970 to 1993. Within Redmond there is a diverse and growing economic base including high-tech firms such as Microsoft Corporation and light industry. From 1970 to 1993, the number of businesses located in Redmond increased 708 percent, totaling 3,190 firms. In 1999, Redmond employed roughly 90,000 workers.

Redmond has several distinct neighborhoods where parks and businesses intermingle with multi-family developments. Redmond has generally succeeded in conserving agricultural lands and rural areas while improving mobility for people and goods given the increasing pressures on housing and transportation. The City of Redmond wishes to protect its historical background and natural setting, while shaping itself into a "healthy and dynamic suburban community" (City of Redmond Comprehensive Plan, 1999).

Redmond is a fairly affluent community in which the median annual household income in 1997 was roughly \$69,000. The housing units in Redmond are more or less equally split between single-family dwellings (10,083 units) and multi-family dwellings (8,990 units) (1999 data). There are many low-to-moderate-density residential areas around SR 520 as it progresses from the southwest corner of Redmond into the city center. These areas are well-established neighborhoods with many connecting roads to developments northward.

Other major arterials such as Willows Road, which connects the CBD to the northwest corner of the city, serve as a boundary between high-density residential neighborhoods and business park and city center uses. In the easternmost area of Redmond along the Redmond-Fall City Road (SR 202), low-to-moderate-density and high-density developments are clustered around the road. Other high-density residential areas are along Avondale Road to the northeast and in the Sammamish Valley just north of the CBD.

3.15.3.5 Kirkland

The city of Kirkland covers approximately 11 square miles and is located north of Bellevue and west of Redmond, along the eastern shore of Lake Washington. Kirkland is one of the older cities on the Eastside, incorporated in 1905. The current population is roughly 45,090, and residents have a median household income of \$62,900 (1997 data). Kirkland includes a well-planned, diverse business community that includes many art galleries and restaurants in the CBD which provide the city with a well-established arts center, professional services, high-tech firms, and a strong retail sector.

Kirkland is primarily a residential community and has over 30 public parks interspersed within residential areas. A vast majority of Kirkland is designated as low-density residential. The housing includes 9,961 single-family residential units and 11,187 multi-family residential units. The high-density units are mostly located in the CBD and the Totem Lake area near the I-405/NE 124th Street interchange.

I-405 spans the city from the southern border north of SR 520 to the north central border at Kingsgate (unincorporated King County). The uses along the interstate include parks and open space, low-density residential, limited medium-density residential, and to the north, the

commercial areas in the Totem Lake area. Along the major arterials branching off from I-405 are minor commercial areas and neighborhoods.

3.15.3.6 Bellevue

Bellevue is the fifth largest city in Washington with a population of 106,400. The median annual household income in 1997 was \$67,100. Bellevue is located south of Kirkland and north of Newcastle. Bellevue's natural amenities include tree-covered hillsides, streams, smaller lakes, large wetlands, and the Lake Washington shoreline.

Bellevue is the financial, retail, and office center of the Eastside. The largest employers include Microsoft, Overlake Hospital, and Puget Sound Energy. The vibrant downtown is home to many more businesses. Bellevue's CBD is a compact mixed-use hub with places to live, shop, play, and work. Bellevue allows high-intensity residential development in the downtown area in order to facilitate its desire for a convenient, livable urban environment.

Over half of all land in Bellevue is dedicated to residential uses. Currently there are 25,633 single-family units and 22,718 multi-family units in the City. Housing ranges from residential estates on an acre or more to downtown mid-rise condominiums and apartments. Bellevue has concentrated higher density residential land uses near its Urban Center and along transportation corridors in order to provide adequate densities that would support future high-capacity transit service.

I-405 passes from the southwest corner of Bellevue to the northern border with Kirkland. I-90 spans the lower half of the City and connects the Eastside with Seattle via Mercer Island. SR 520 passes through the northern part of the city, also connecting the Eastside to Seattle. There are several major arterials in Bellevue such as Coal Creek Parkway, Bellevue Way SE, and Bellevue-Redmond Road.

Prominent uses along I-405 include single-family residential, commercial, multi-family residential, light industrial, and office. In the single-family areas to the south, the densities on both sides of the interstate range from 1 to 5 units per acre. I-405 travels through the southwest corner of the single-family area. However, individual neighborhoods are not divided by I-405 and established developments lie either east or west of the interstate. From the I-90 interchange northward, the most common uses bordering the interstate are commercial, multi-family residential, and light industrial.

Along I-90 in Bellevue, the major uses include commercial and light industrial. There are few high-density multi-family zones in this area. Most of the uses along SR 520 in Bellevue are light industrial, commercial, and office-oriented. There are few residential areas along Bellevue's section of SR 520 and along Bellevue-Redmond Road. The largest residential communities are mainly located in the eastern half of the city.

3.15.3.7 Newcastle

Newcastle was recently incorporated and encompasses 4.4 square miles. Newcastle is located in the foothills east of Lake Washington south of Bellevue and north of Renton. Currently, the population of 8,645 is small relative to the cities in the vicinity, but growing at an expected rate of approximately 12 percent in the next 10 years. I-405 runs parallel to the northwest border of the city.

Newcastle serves primarily as a “bedroom community” with its predominant land use being single-family residential. Its close proximity to Renton to the south, Bellevue to the north, and Seattle to the west provide many employment opportunities outside of the city. There is currently little land within Newcastle suitable for the development of large-scale commerce and industry.

Historically, Newcastle has been oriented toward single-family homes. In 1999 there were approximately 2,623 single-family homes and only 968 multi-family units. Approximately 85 percent of all the city’s households fall into the middle- to upper-income levels; the 1997 median annual household income in Newcastle was \$88,700. There is limited land available for future development, with most occurring to the east of Coal Creek Parkway, and the mature development (consisting of single-family residential areas) already established to the west of Coal Creek Parkway.

The neighborhoods located closest to I-405 are zoned for medium-density single-family residential (4 units per acre). Further east to Coal Creek Parkway, the area is zoned more intensively with high-density single-family residential (6 units per acre). The multi-family zoned areas with higher allowed densities are found intermittently along Coal Creek Parkway and in one area along the western border of the city. The high-density residential uses along Coal Creek Parkway are distinctly separated into neighborhoods on either side of the parkway. From SE 64th Avenue to approximately SE 72nd Street, Lake Washington Boulevard divides the neighborhoods in the northwest corner of Newcastle. This area is predominantly categorized as medium-density residential.

3.15.3.8 Renton

Renton is located south of Newcastle, northeast of Tukwila and the I-405/I-5 interchange, and along the southeast shore of Lake Washington. On the east it is bordered by unincorporated King County. The city includes 10,867 acres and has a population of 50,052 (2000 Census). Renton is a well-established city with an economy that is diversified, yet still highly dependent on Boeing. There are 1,721 employers representing 45,882 jobs. Boeing is the largest employer in Renton, representing 36 percent of jobs. Other employers include Multiple Zones, Wizards of the Coast, K&L Distributors, and PACCAR. Median household income in 1997 was \$53,200.

Renton is a community that provides a variety of stable single-family and multi-family neighborhoods, most of which are located in the hills east of the I-405 corridor. Provisions for housing include 11,170 single-family and 12,399 multi-family units. The largest land use in terms of percentage of land area is single-family residential. However, Renton continues to benefit from a diverse industrial base and increased office development located in the Green River Valley and adjacent to the south shore of Lake Washington. Renton’s downtown is one of 14 Urban Centers in the region, and won awards through the PSRC for its downtown revitalization efforts. Commercial areas outside the downtown core include multi-family areas as well as suburban commercial establishments.

I-405 runs through the western half of Renton and up through the northwest corner of the city. Several state highways contribute to Renton’s internal arterial system, including SR 900, SR 169, SR 515, and SR 167. Highway 169 connects I-405 in downtown Renton to Maple Valley east of the city. Highway 167 runs south from the CBD past I-405 to the Kent valley. Renton’s Urban Center is located north and west of I-405. Office development is increasing in the Green River Valley and adjacent on the south shore of Lake Washington. To the east of I-405, uses are

predominantly residential. These developments are mostly located on the hills that overlook I-405. Residential single-family areas also are located in the hills to the east above SR 167.

Highway 169 is bounded on both sides by low-density residential uses. Most of the area along this highway is still in a residential rural character except for a few small developments. These rural areas are preserving Renton's open space and agricultural land and protecting environmentally sensitive and critical areas.

3.15.3.9 Tukwila

Tukwila is located southwest of Lake Washington and is surrounded by Renton to the east, Kent to the south, SeaTac to the west, and Seattle to the north. Tukwila is a regional crossroads with the I-5/I-405 interchange at the heart of the city. State Routes 599 and 518 serve the eastern portions of the city, and SR 181 serves the southeast. The city is a major retail and manufacturing center for South King County with large employers such as Boeing, NC Machinery, and Kenworth Truck Company. The total employment for the city (52,141) is roughly three times the city population (14,870). The median annual household income in 1997 was \$47,500.

Tukwila has much more land devoted to commercial and manufacturing developments than residential areas. In 1999 there were approximately 3,319 single-family units and 4,241 multi-family units in Tukwila. The residential areas are divided into distinct segments by freeways, arterials, hillsides, and the Green River, all of which tend to isolate the neighborhoods.

Most of the residential areas in Tukwila are located north of I-405/SR 518. Along I-405 and SR 518, most of the uses are restricted to high-density residential and office, or a combination of the two, in a mixed-use setting. Beyond the multi-family areas are low-density residential areas, all of which are close to and highly impacted by arterials prominent in the area.

There is one low-density residential sector south of SR 518 and west of I-5. This area is disconnected from other uses within the city limits but lies in very close proximity to the interstates.

3.15.3.10 Kent

The city of Kent is located in South King County and is bordered by Tukwila to the north, SeaTac and Des Moines to the west, and Auburn and Federal Way to the south. Areas east of the city are unincorporated except for the small city of Covington. Kent encompasses 29 square miles and has a population of 73,140. The city is highly business-oriented with the state's highest concentration of industrial space. The biggest employers include Sysco Food Services, Continental Mills, and Sun Sportswear, and the total employment for the city was 59,212 in 1999.

The neighborhoods in Kent consist of older, more traditional residential neighborhoods in the central area and newer development on the outskirts. There are 12,855 single-family units and 19,296 multi-family units in Kent. Most of the single-family areas support a density of 3 units per acre. Kent is currently reviewing potential annexation sites in the northeast corner above the city limits in unincorporated King County, and if annexed, these areas would support higher urban residential densities of 4 to 12 units per acre. This could increase traffic volumes and congestion along the arterials in the surrounding areas.

The major transportation corridors running through the city include SR 516, which connects to I-5 in the west, and SR 167 which runs from north-central to south-central Kent. The

predominant uses along SR 167 are manufacturing and industrial, with a few sections of low-density single-family units. The southern section along the highway is planned for agricultural uses. The major residential areas are found east of SR 167 behind a buffer of industrial, city center, and commercial uses and clustered around small commercial and mixed use areas.

3.15.3.11 *King County*

King County is the 12th most populous county in the nation with a population of over 1.6 million people. King County spans the eastern shore of Puget Sound from Richmond Beach to Federal Way, including Vashon Island, and covers approximately 2,200 square miles eastward to Chelan and Kittitas counties. King County is bordered to the north by Snohomish County, to the west by Kitsap County, and to the south by Pierce County. King County's biggest employers are the Boeing Company, the University of Washington, and Microsoft Corporation. The 1997 median annual household income for households in King County was roughly \$45,300 to \$53,200. Housing in 1997 included 430,603 single-family units and 269,088 multi-family units.

Like several other counties in Washington State, King County has experienced major growth in the last 20 years. Since 1980, the county's population has grown by almost 20 percent, resulting in increased pressures on Urban Centers, housing, and the environment. Growth is also expected to increase by roughly 10 percent in the next 10 years. The King County Growth Management Planning Council has designated certain areas within the county as Urban Growth Areas. These areas are planned to accommodate much of the county's expected household and employment growth for the next 20 years and include unincorporated areas between Bothell and Kirkland, east of Redmond, east of Lake Sammamish, and east of Newcastle and Renton.

3.15.3.12 *Snohomish County*

Snohomish County lies north of King County and south of Skagit County and covers 2,090 square miles. The 1998 population was recorded as 568,100, which equates to a 22 percent growth rate since 1990, making Snohomish the third most populous county in the state. Snohomish County is characterized by a well-established manufacturing economy with a growing service sector, similar to the changing economies of many counties in Western Washington.

Much of the unincorporated area of Snohomish County north of Bothell and the north I-5/I-405 interchange is zoned for differing density residential uses. This area also lies within Snohomish County's designated Urban Growth Area (UGA), which will provide the necessary densities for future growth. The existing facilities and urban development character in incorporated and unincorporated areas will support growing employment and household growth demands. In the UGA, community character will be defined and enhanced within the variety of land uses for that area to create connected, identifiable neighborhoods. These areas will remain UGA as long as they maintain the ability to provide sufficient facilities, such as transportation systems.

The I-5/I-405 interchange area currently lacks a definable community character. Although the area is UGA, the specific future uses of the area are uncertain due to simultaneous influences from the incorporated areas of Bothell, Briar, Mill Creek, and Lynnwood. This area will need boundaries within specified jurisdictions so that a definable character can be maintained, while preserving the character of outlying areas.

3.15.4 Impacts

The impact assessment was performed through inspections of the locations of potential displacement, land use, traffic, noise and visual/aesthetic impacts relative to residential areas. Low social impacts involve minor environmental impacts far from residential areas while high social impacts involve multiple environmental impacts near residential neighborhoods.

3.15.4.1 No Action Alternative

Construction Impacts

Construction impacts are short-term, temporary impacts that will end once construction has finished. These impacts include construction-related noise and traffic that could hinder neighborhood travel patterns or temporarily fragment a community.

The No Action Alternative involves no additional construction beyond what is planned and committed within the corridor. These construction activities would generate neighborhood impacts (primarily from temporary traffic changes and noise impacts) independent of the I-405 Corridor Program. The impacts from these projects are or will be addressed within the environmental analysis, documentation, and for the individual projects.

Operational Impacts

Operational impacts are those that would have long-lasting effects on community cohesion or social interaction. These can include separating adjoining residential areas, isolating portions of the neighborhood, creating barriers within a neighborhood, and changing the historical character of the neighborhood.

The No Action Alternative would have the greatest long-term social impact because of worsening traffic conditions and associated noise and accessibility impacts. Although there would be substantially fewer projects (that could create physical barriers to social interactions) in the No Action Alternative than in the action alternatives, congested conditions within neighborhoods could discourage interactions. Throughout the northern and central areas of the corridor, increases in traffic from the No Action Alternative would hinder social interaction.

Cities in the northern corridor area (Bothell, Woodinville, and Kirkland) would experience low to moderate impacts to community cohesion. Bothell and Woodinville would experience moderate traffic impacts, hindering inter- and intra-neighborhood movement. The traffic impacts are primarily responsible for the overall moderate level of impact to community cohesion in Bothell and Woodinville, as well as in unincorporated Snohomish County. Kenmore would have higher traffic impacts, resulting in a moderate level of impact to community cohesion. Aside from traffic impacts in these areas, there would only be limited land use, noise, and visual impacts.

There are few projects in the No Action Alternative that could create additional physical barriers to social interaction; therefore, no substantial impact is anticipated. The majority of the projects would be on SR 524, SR 522, and I-405 and would not affect movement within or between communities in the northern corridor area. However, widespread congested conditions within neighborhoods could discourage interactions.

Cities in the central corridor area (Kirkland, Redmond, Bellevue, and Newcastle) would also experience low to moderate impacts to community cohesion. Traffic congestion would have the greatest impact on community cohesion, particularly in Redmond, Kirkland, and Bellevue.

Redmond and Bellevue would also have low-level localized land use impacts; overall these two cities would have moderate to low community cohesion impacts. Kirkland would have low-level noise impacts, but would not have noticeable land use and visual impacts; overall, Kirkland would receive low impacts to community cohesion. Traffic impacts in unincorporated King County would result in low community cohesion impacts.

Arterial improvements in Redmond could create additional physical barriers to social interaction; however, the scale of improvements is not likely to hinder inter-neighborhood movement. No other cities have projects that would create barriers to social interaction.

Traffic congestion would be the only impact to community cohesion in the southern corridor area. Increasing traffic would impact Renton and Kent, resulting in low levels of community cohesion impacts overall. Tukwila would have no impacts.

Since there would be substantially fewer projects in the No Action Alternative than the action alternatives, there would be no additional physical barriers to social interaction created. However, congested conditions within neighborhoods could discourage interactions.

3.15.4.2 *Alternative 1: HCT/TDM Emphasis*

Construction Impacts

This alternative would have the least impact to existing traffic during construction compared to other action alternatives because much of the HCT alignment is separated from existing roadways. Construction on arterials may encourage traffic to detour onto residential neighborhood roads. Visual construction impacts could include the presence of construction equipment and workers, materials, debris, signage, and staging areas that would reduce the visual quality in the construction zone. Temporary lighting may be employed for nighttime construction of some improvements. Intermittent construction noise would occur throughout the construction period, with most noise generated from construction vehicles and activities such as pile driving. Impacts would be widely dispersed across the corridor. Heavier construction impacts would occur in areas where more improvements are planned to occur, such as Kirkland, Bellevue, and Redmond. Construction impacts would mostly pose a temporary inconvenience to social interaction.

Operational Impacts

Overall effects on community cohesion and social interaction would be low for each of the action alternatives, and each would have less impact than the No Action Alternative. In the action alternatives, most proposed improvements would occur in existing major transportation corridors. This would restrict many of the social impacts to the edges of existing neighborhoods, lessening the overall impact. Improvements that would occur on neighborhood arterials, such as HOV improvements, would not be substantial enough to alter intra-neighborhood travel patterns. This would be particularly true since the action alternatives would divert traffic off of neighborhood arterials and onto highways. In nearly all cases, social impacts revealed a balance between traffic improvements and low-level noise, displacement, visual, and land use impacts.

Alternative 1 would have low impacts to neighborhood community cohesion throughout the corridor. Cities such as Bellevue, Redmond, and Renton would face the greatest potential for impacts due to traffic and land use influences. Other cities, such as Kent and Bothell, would have negligible impacts from the proposed improvements.

Cities in the northern corridor area would see slightly positive or slightly negative impacts to community cohesion. Community cohesion in Bothell would be slightly better with Alternative 1. There would be an overall improvement in traffic conditions because transportation improvements would funnel traffic off of neighborhood arterials and onto highways, improving intra- and inter-neighborhood movement. Noise impacts would be isolated mainly to the I-405 corridor, away from residential areas. There would be no displacements in Bothell, and land use impacts would only be associated with growth around high-capacity transit stations.

Kenmore and Woodinville would have low impacts to community cohesion, primarily because of the potential for changes in land use patterns. These two cities would experience the same displacements, noise, and traffic impacts as in the No Action Alternative. This is largely because the only improvements proposed within their jurisdictions are along SR 522, which is mostly commercial and residential. Unincorporated parts of Snohomish County outside of these jurisdictions would be affected in a manner similar to the incorporated cities; changes in land uses would represent the most likely impact to community cohesion, although the magnitude of impact would be low since changes would only occur in isolated areas. Unincorporated Snohomish County would not see any changes in traffic volumes over the No Action Alternative.

Improvements contained in Alternative 1 would primarily occur on highways and arterials that, to some extent, already act as physical barriers; proposed improvements are not expected to increase physical separation. In Bothell and unincorporated Snohomish County, proposed improvements would occur in existing highway corridors along the perimeter of existing neighborhoods, avoiding physical neighborhood separation. These improvements are not expected to create physical barriers to social interaction above current conditions in the I-405 and SR 527 corridors. Improvements to SR 522 in Kenmore and Woodinville are not expected to impact movements between existing neighborhoods to the north and south of the highway.

Cities in the central corridor area would consistently receive greater impacts than in other parts of the corridor; however, the level of their impacts over the No Action Alternative would be low. Unincorporated portions of King County (north of Kirkland) are the only areas that would have slightly beneficial impacts to community cohesion. This would be caused by an improvement in traffic volumes in the neighborhoods surrounding I-405 and no increase in noise and displacements. Newcastle, because its neighborhoods are mostly located in the hills above the I-405 corridor away from the proposed improvements, would have the same displacement, noise, and traffic impacts as in the No Action Alternative. Transit-supportive land uses could change the character of some areas near the corridor, but this would be expected to have a low impact on overall cohesion.

A heavy concentration of improvements in Bellevue and Kirkland would improve mobility within these jurisdictions without allowing large amounts of noise to spill out of the I-405 corridor and into the neighborhoods that flank the interstate. I-405 improvements in Bellevue would displace approximately 26 residences; however, these would occur along the periphery of existing neighborhoods and would have a low impact on community cohesion. Major view corridors in Kirkland and Bellevue would receive low or no additional impacts over the No Action Alternative. Low-level land use and traffic impacts in Redmond would occur south and west of its neighborhoods. There would be low impacts to community cohesion there.

Overall, proposed improvements in the central corridor area occur mostly within the I-405 corridor; these improvements are not expected to present a barrier to social interaction, assuming

that connections across the corridor would be preserved. Arterial HOV improvements in Redmond and Kirkland have the potential to act as increased barriers between existing neighborhoods; however, pedestrian crossings across these streets would be preserved and the function of the streets as major arterials would not change from existing conditions.

Community cohesion impacts for cities in the southern corridor area would increase slightly as the number of proposed improvements increases, but would not rise above a low level of impact. Most proposed improvements in Alternative 1 would be constructed in the city of Renton; however, there would be neither a positive nor negative traffic impact in terms of its effect on community cohesion. Renton would have low land use and displacement impacts. These would be mainly along the I-405 commercial areas of Renton. Tukwila and Kent, each with a limited number of proposed improvements within their respective city limits, would be mostly unaffected beyond the level of No Action Alternative impacts. Both cities would have land use impacts that would be localized and would have only a low impact on overall community cohesion.

The improvements proposed in Alternative 1 are not expected to greatly affect social interaction between or within neighborhood areas in the hills east of I-405. Most Alternative 1 improvements in the southern corridor area would be located in or around the commercial and light industrial areas near I-405 in Renton. Social interaction between the neighborhoods within Kent and Tukwila would have a low probability of being impacted by these improvements, due to a limited number of improvements and the distance between the improvements and existing neighborhoods.

Some social interaction impacts may be offset over the long term by the presence of high-capacity transit stations. The establishment of transit systems can encourage greater investment by property owners at station areas. Development oriented toward transit is typically also oriented toward pedestrian interaction within communities. Faster, more reliable, and more frequent transit service can also increase access to community facilities and employment opportunities, benefiting all residents of neighborhoods with stations. In Alternative 1, stations would be concentrated in the central corridor area, most notably in Bellevue, but stations could also be built in Kent, Tukwila, Bothell, and Woodinville.

3.15.4.3 *Alternative 2: Mixed Mode with HCT/Transit Emphasis*

Construction Impacts

Net effects to neighborhoods in Alternative 2 would be comparable to Alternative 1. Although construction impacts would be widespread, Bothell, Kirkland, Bellevue, and Renton would likely have the most construction impacts due to the number of proposed improvements within their jurisdictions. Construction impacts affecting traffic would be similar to Alternative 1; most traffic control measures would result in a decrease in capacity and increase in system-wide roadway congestion. There would be slightly more construction noise than in Alternative 1.

Operational Impacts

Alternative 2 would have the lowest social impact throughout the corridor, but would not be substantially better than the other three action alternatives. More cities would see an improvement over the No Action Alternative operational conditions in this alternative than in the other alternatives. Similar to Alternative 1, changes in land uses have the greatest potential to disrupt existing community cohesion. This would be offset by area-wide traffic improvements. Bellevue would have the most impacts of all cities; Kenmore, Woodinville, Newcastle, and unincorporated parts of King and Snohomish counties would have slightly beneficial impacts.

In Alternative 2, cities in the northern corridor area would have mostly positive impacts on community cohesion compared to the No Action Alternative and Alternative 1. All northern cities, as well as unincorporated Snohomish County, would see an overall improvement in traffic conditions. Traffic studies for this alternative show that traffic would move from neighborhood arterials onto nearby highways and I-405, improving community cohesion. Community cohesion in Bothell would be slightly better in Alternative 2 versus the No Action Alternative; however, Bothell would be the only northern city in Alternative 2 with negative impacts. There would be low levels of noise, displacement, land use, and visual impacts; each of these impacts would be confined to the I-405 corridor and would not impact neighborhoods established deeper within the city.

Kenmore, Woodinville, and unincorporated Snohomish County would experience the same displacement, noise, and traffic impacts as in the No Action Alternative. This is largely because the only improvements proposed within their jurisdictions are along SR 522, which is mostly commercial and residential. Unincorporated parts of Snohomish County outside of these jurisdictions would be affected in a manner similar to the incorporated cities. Changes in land uses would represent the most likely effect on community cohesion, although the magnitude of impact would be low since changes would only occur in isolated areas and most neighborhoods in the unincorporated areas are not as well defined. Unincorporated Snohomish County would not see any changes in traffic volumes over the No Action Alternative.

Alternative 2 would have limited impacts to social interaction in the northern corridor area. Proposed improvements would occur in existing highway corridors along the perimeter of existing neighborhoods in Bothell and Snohomish County and are most heavily concentrated in commercial areas. These improvements are not expected to create physical barriers to social interaction above current conditions in the I-405 and SR 527 corridors. Improvements to SR 522 in Kenmore and Woodinville are not expected to impact movements between existing neighborhoods to the north and south of the highway.

In the central corridor area, the cities of Redmond and Newcastle would have no additional impacts, while Kirkland and Bellevue would have a low level of additional impacts over the No Action Alternative. Unincorporated portions of King County would have slightly beneficial effects on community cohesion. King County would only have low impacts in regard to land uses that could be influenced by high-capacity transit operation. There would be no additional displacement or noise impacts in Redmond and Newcastle. Both of these cities would have traffic benefits offset by possible low-level land use impacts for a net impact to community cohesion that would be similar to No Action conditions. A heavy concentration of improvements in Bellevue and Kirkland would improve mobility within these jurisdictions without allowing large amounts of noise to substantially spill out of the I-405 corridor and into the neighborhoods that flank the interstate. I-405 improvements in Bellevue would displace approximately 36 residences and 12 business along I-405. Significant view corridors in Kirkland and Bellevue would receive a low-level of impact over the No Action Alternative, reducing the potential for community cohesion and social interaction impacts. Since these impacts would occur primarily along the perimeter of existing neighborhoods, community cohesion impacts would be low.

Overall, proposed improvements in the central corridor area would occur mostly within the I-405 corridor; these are not expected to present a barrier to social interaction assuming that connections across the corridor would be preserved. Improvements to Coal Creek Parkway (in

Newcastle) and Willows Road (in Redmond) would represent the only inter-neighborhood improvements that could slightly increase physical separation between neighborhoods.

Community cohesion impacts for cities in the southern corridor area would slightly increase over No Action conditions. Most proposed improvements in Alternative 2 would be constructed in the city of Renton; however many of these would occur near downtown, away from residential areas. Renton would have low land use and displacement impacts, mainly along the I-405 commercial areas of Renton, resulting in low impacts to community cohesion. Traffic in Renton would improve, while noise impacts would not be above those resulting from the No Action Alternative. Overall, Renton's neighborhoods, mostly south and east of the most intensive improvements, would not be greatly affected. Tukwila and Kent, each with a limited number of proposed improvements within their respective city limits, would be mostly unaffected beyond the level of No Action Alternative impacts. Both cities would have low-level land use impacts that would be localized near proposed HCT improvements, and therefore would have only a low impact on overall community cohesion.

Most Alternative 2 improvements would be located in or around the commercial and light industrial areas near I-405, although some arterial improvements in Kent could have low-level traffic impacts. Social interaction between the neighborhoods within Kent and Tukwila would have a low probability of being affected by these improvements, due to the low number of proposed improvements.

Some social interaction impacts may be offset over the long term by the presence of high-capacity transit stations. Transit-oriented development could stimulate increased interaction within communities. Neighborhood residents also would benefit from improved access. Alternative 2 would include the same number of stations in the same cities as in Alternative 1.

3.15.4.4 *Alternative 3: Mixed Mode Emphasis*

Construction Impacts

The scale of proposed improvements (particularly on I-405) in Alternative 3 would increase the duration and extent of construction impacts throughout the corridor. The duration of traffic impacts will more than double compared to Alternatives 1 and 2 because of the additional lane miles that would be under construction. Noise levels would be roughly the same as in Alternatives 1 and 2; however, most noise would be associated with I-405 improvements. There would be no construction noise in the HCT corridor.

Operational Impacts

Alternative 3 would have slightly lower impacts on neighborhood community cohesion than Alternative 2. Land use, displacement, and visual impacts would each have roughly the same potential to disrupt existing neighborhood connections; however, the overall effect on community cohesion throughout the affected area would still be low. Bellevue and Kirkland would likely have the greatest impacts, due to a heavy concentration of improvements within their respective jurisdictions. Cities farther away from I-405, such as Redmond and Woodinville, would see only a slight improvement over the No Action Alternative conditions.

Cities in the northern corridor area, as well as unincorporated Snohomish County, would mostly see very slight positive impacts or no change in community cohesion. Bothell, the one exception,

would have low-level displacement, noise, land use, and visual impacts in combination with traffic improvements. There would be a greater shift in traffic off of neighborhood arterials and onto highways than in Alternatives 1 and 2, improving intra- and inter-neighborhood movement, but also increasing noise impacts. Similar to other alternatives, these impacts would be isolated mainly along the I-405 corridor at the periphery of existing neighborhoods.

Kenmore would have community cohesion impacts comparable to those found in the No Action Alternative. Similar to Alternative 2, Kenmore would have improved traffic conditions and localized land use impacts. Woodinville would be affected in a manner similar to Kenmore; there would be few proposed improvements and they would occur along existing highways/major arterials. Land use impacts in Woodinville would be low; the net effect of all of the improvements would be a slightly positive impact on Woodinville community cohesion. Unincorporated parts of Snohomish County outside of these jurisdictions would be affected in a manner comparable to the incorporated cities; changes in land uses would represent the most likely impact to community cohesion, although the magnitude of impact would be low since changes would only occur in isolated areas.

Improvements in Alternative 3 are not expected to create physical barriers to social interaction above current conditions in the I-405 corridor. The major improvement proposed in Kenmore and Woodinville along SR 522 would not be expected to affect movements between existing neighborhoods to the north and south of the highway beyond existing conditions. Proposed improvements in Snohomish County would not be extensive enough to jeopardize social interaction between neighborhoods.

Cities in the central corridor area would consistently have greater impacts than in other parts of the affected area; however, the level of their impacts over the No Action Alternative impacts would be low. Kirkland and Bellevue would experience the greatest impacts of any cities in the corridor, largely due to displacement impacts. These two cities would have 46 and 97 total displacements, respectively, occurring primarily near I-405 at the edge of existing neighborhoods. The location of these displacements, as well as land use, noise, and visual impacts, would result in a low level of impact to community cohesion. Redmond and Newcastle would have community cohesion impacts similar to those found in Alternative 2. There would be no additional displacement and noise impacts in these two cities relative to the No Action Alternative, slight traffic improvements, and low land use impacts. Unincorporated portions of King County would have slightly beneficial effects on community cohesion. This would be caused by an improvement in traffic volumes (even greater than Alternatives 1 and 2) in the neighborhoods surrounding I-405 and a general lack of noise and displacement impacts. Transit-supportive land uses could change the character of some areas near the corridor, but this would be expected to have a low impact on overall cohesion.

Overall, proposed improvements in the central corridor area occur mostly within the I-405 corridor; these improvements are not expected to present a barrier to social interaction assuming that connections across the corridor would be preserved. Arterial HOV improvements in Redmond, Kirkland, and Newcastle have the potential to act as increased barriers between existing neighborhoods. However, because these streets are already major arterials, their effect as a physical barrier would not likely increase substantially as a result of these proposed improvements.

Community cohesion impacts for cities in the southern corridor area under Alternative 3 would be similar to those in Alternative 2. Renton would have low land use and displacement impacts,

mainly along I-405, resulting in low impacts to community cohesion. Traffic in Renton would improve, while noise impacts would not be above those resulting from the No Action Alternative. Overall, Renton's neighborhoods, mostly south and east of the most intensive improvements, would not be greatly affected. Tukwila, with a limited number of proposed improvements within its city limits, would be mostly unaffected beyond the level of the No Action Alternative impacts. In Kent, there would be low-level traffic and land use impacts, which would result in low community cohesion impacts; most proposed improvements in Kent would occur away from existing neighborhoods.

Most proposed improvements in Alternative 3 would be constructed within the I-405 corridor and along arterials leading to this corridor. Some arterial improvements in the southern corridor area could have social interaction impacts. Social interaction between the neighborhoods within Kent and Tukwila would have a low probability of being affected by these improvements, due to the low number of proposed improvements.

Some social interaction impacts may be offset over the long term by the presence of transit stations. Benefits related to transit stations would be less in Alternative 3 since this alternative would have fewer stations than Alternatives 1 and 2. Stations would be concentrated in Kirkland, Redmond, and Bellevue, offering the greatest benefits to the central corridor area. Stations would also be provided in Bothell, Kent, and Tukwila.

3.15.4.5 *Alternative 4: General Capacity Emphasis*

Construction Impacts

Alternative 4 would have the longest-term and most extensive construction impacts of all the alternatives. The addition of six lanes of roadway capacity in the I-405 corridor would have substantial impacts to traffic compared to the other alternatives because of the extensive use of grade- and barrier-separated alignments, especially in the southern portion of I-405 between Tukwila and the I-90 interchange. There would be more construction noise in the I-405 corridor under Alternative 4 than any of the other alternatives because of construction of the express roadway. However, because these impacts would be primarily within existing transportation corridors, impact to neighborhoods would not be substantial.

Operational Impacts

The net level of social impact caused by the operation of Alternative 4 improvements would be similar to Alternative 1. Although Alternatives 1 and 4 have the poorest ratings of all of the alternatives in terms of social impacts, they would still only have a low impact on community cohesion. Displacement impacts would have the greatest effect on neighborhoods in this alternative. This would be offset by area-wide improvements in traffic flow. Similar to Alternative 3, Kirkland and Bellevue would experience the greatest impacts due to a high concentration of improvements. Woodinville and Redmond would have net benefits to community cohesion, mainly because of traffic improvements and limited displacement and noise impacts.

In Alternative 4, Bothell would experience low impacts to community cohesion while Kenmore, Woodinville, and unincorporated Snohomish County would experience slight benefits or no additional impact compared to the No Action Alternative. Bothell would have low-level displacement, noise, land use, and visual impacts in combination with traffic improvements. Similar to other alternatives, these impacts would be isolated mainly along the I-405 corridor in

Bothell at the periphery of existing neighborhoods. There would be an even greater shift in traffic off of neighborhood arterials and onto highways—the greatest shift of all the alternatives. However, because of noise and displacements, there would still be a low impact to community cohesion.

Kenmore would have improved traffic conditions and localized land use impacts. The major improvement proposed in Kenmore, along SR 522, would not be expected to impact movements between existing neighborhoods to the north and south of the highway beyond existing conditions. Woodinville would be affected in a manner similar to Kenmore; there would be few proposed improvements, and they would occur along existing highways/major arterials. Land use impacts in Woodinville would be slightly less. Because of this, the net effect would be a slightly positive impact on Woodinville community cohesion. Unincorporated parts of Snohomish County outside of these jurisdictions would experience low impacts due to displacements and a slight improvement in traffic. Combined with no noise and land use impacts above the No Action Alternative level, Snohomish County would experience no additional community cohesion impacts.

Proposed improvements in Alternative 4 are not expected to create physical barriers to social interaction above current conditions in the I-405 and SR 527 corridors. Major improvements proposed in Kenmore and Woodinville, along SR 522, are not expected to affect movements between existing neighborhoods to the north and south of the highway beyond existing conditions. Proposed improvements in Snohomish County would not be extensive enough to jeopardize social interaction between neighborhoods.

In Alternative 4, cities in the central corridor area would experience impacts very similar to Alternative 3. As in Alternative 3, Kirkland and Bellevue would receive the greatest impacts of any cities in the affected area, largely due to displacement impacts. These two cities would have 31 and 72 total displacements, respectively, occurring primarily near the I-405 corridor, at the edge of existing neighborhoods. However, the location of these displacements, as well as land use, noise, and visual impacts, would result in a low level of impact to community cohesion. Although Bellevue would have fewer proposed improvements outside of the I-405 corridor in this alternative compared to the other action alternatives, community cohesion impacts would be roughly the same because of the magnitude of the I-405 improvement impacts. Redmond and Newcastle would also experience community cohesion impacts similar to those found in Alternative 3. There would not be substantial additional displacement and noise impacts in these two cities relative to the No Action Alternative, and there would be slight traffic improvements and low land use impacts. Unincorporated portions of King County would experience slightly beneficial impacts to community cohesion. This would be caused by an improvement in traffic volumes (even greater than Alternatives 1 and 2) in the neighborhoods surrounding I-405 and general lack of noise and displacement impacts.

Unlike other alternatives, several proposed improvements in Kirkland, Redmond, and Newcastle are outside of the immediate I-405 corridor; these improvements could be expected to present a barrier to social interaction if pedestrian and cross-traffic movement across individual arterials is not preserved.

In Alternative 4, cities in the southern corridor area would experience a low level of community cohesion impacts. Renton would have 50 total displacements in this alternative, mainly along the I-405 corridor along the edges of existing neighborhoods. Renton would have low land use

and visual impacts, offsetting some of the traffic benefits that would reduce volumes on neighborhood streets. Tukwila, with a limited number of proposed improvements within its city limits, would be mostly unaffected beyond the level of No Action Alternative impacts. There would be low-level displacement and land use impacts; overall Tukwila would experience low impacts to community cohesion. In Kent, there would be low-level traffic and land use impacts, which would result in low community cohesion impacts; most proposed improvements in Kent would occur away from existing neighborhoods.

Most proposed improvements in Alternative 4 would be constructed within the I-405 corridor and along major arterials leading to this corridor. Alternative 4 improvements are not expected to greatly affect the social interaction of Renton neighborhood areas in the hills east of I-405. Some arterial improvements in the southern corridor area could have social interaction impacts, although most of these arterials cross large-parcel commercial and light industrial developments. However, social interaction between the neighborhoods within Kent and Tukwila would have a low probability of being affected by these improvements, since most neighborhoods would be located away from the improvements.

3.15.4.6 Preferred Alternative

Construction Impacts

The scale of proposed improvements (particularly on I-405) in the Preferred Alternative would be similar to that proposed for Alternative 3. The duration of traffic impacts would be slightly greater because of the additional arterial capacity projects that are included. Noise levels would be roughly the same as in Alternative 3; however, additional noise would be expected from the arterial projects, primarily in Tukwila, Redmond, and Bothell.

Operational Impacts

The Preferred Alternative would have impacts on neighborhood community cohesion very similar to Alternative 3. Land use, displacement, and visual impacts would each have roughly the same potential to disrupt existing neighborhood connections; however, the overall effect on community cohesion throughout all cities in the study area would be low. Bellevue, Redmond, and Kirkland would likely have the greatest impacts due to a heavy concentration of improvements within their respective jurisdictions. Areas farther away from I-405, such as Woodinville and unincorporated King County, would see a slight improvement over the No Action Alternative conditions similar to Alternative 3.

Cities in the northern corridor area would have impacts and benefits similar to those described in Alternative 3. The city of Bothell would have slightly higher traffic and noise impacts due to the proposed widening of SR 527. Overall, in the northern corridor, traffic would be shifted off of neighborhood arterials and onto highways, which would improve intra- and inter-neighborhood movement but would also shift the noise impacts. Similar to the other alternatives, these impacts would be isolated mainly along the I-405 corridor at the periphery of existing neighborhoods.

Kenmore would have community cohesion impacts comparable to those found in Alternative 3 and would experience improved traffic conditions and localized land use impacts. Woodinville would be affected in a manner similar to Kenmore; there would be few proposed improvements, and they would occur along existing highways and major arterials. Additional proposed projects, such as the widening of SR 202, would not greatly affect social conditions beyond those described for Alternative 3. Traffic and noise impacts could be somewhat higher near SR 202.

Land use impacts in Woodinville would be low; the net effect of all improvements would be a slightly positive impact on Woodinville community cohesion. Unincorporated parts of Snohomish County outside of these jurisdictions would be affected in a manner comparable to Alternative 3.

Improvements in the Preferred Alternative are not expected to create physical barriers to social interaction above current conditions in the I-405 corridor. The major improvement proposed in Kenmore and Woodinville along SR 522 would not be expected to affect movements between existing neighborhoods to the north and south of the highway beyond existing conditions. Proposed improvements in Snohomish County would not be extensive enough to jeopardize social interaction between neighborhoods.

Cities in the central corridor area would have impacts very similar to Alternative 3; the level of impacts to these cities in excess of the No Action Alternative would be low. There are no additional projects in the Bellevue area compared to Alternative 3 that would have social impacts. Bellevue would remain one of the higher-impacted cities, however, due to displacement impacts. Kirkland could experience less noise and fewer displacements near I-405 compared to Alternative 3 due to smaller proposed improvements to the freeway. For both cities, the location of displacements, as well as land use, noise, and visual impacts, would result in a low level of impact to community cohesion. Newcastle would have community cohesion impacts similar to those found in Alternative 3. Compared to Alternative 3, the Preferred Alternative would include additional projects along I-405 that would have limited impacts to nearby neighborhoods. There would be no additional displacement and noise impacts in this city relative to the No Action Alternative or Alternative 3. The Preferred Alternative would include arterial projects in the city of Redmond that could result in additional traffic, noise, and displacement impacts. Redmond would have a low-level social impact under the Preferred Alternative. Unincorporated portions of King County would experience the same beneficial effects on community cohesion as Alternative 3.

Overall, proposed improvements in the central corridor area occur mostly within the I-405 corridor; these improvements are not expected to present a barrier to social interaction, assuming that connections across the corridor are preserved. Arterial HOV improvements in Redmond, Kirkland, and Newcastle have the potential to act as increased barriers between existing neighborhoods. However, because these streets are already major arterials, their effect as a physical barrier would not likely increase substantially as a result of these proposed improvements.

Community cohesion impacts for cities in the southern corridor area under the Preferred Alternative would be similar to those in Alternative 3. Renton would have the same land use and displacement impacts as well as the same traffic improvements. Noise impacts would be reduced near SR 167 compared to Alternative 3 due to a shortened proposed widening project. Overall, Renton's neighborhoods, mostly south and east of the most intensive improvements, would not be greatly affected. Tukwila, with a limited number of proposed improvements within its city limits, would be mostly unaffected beyond the level of Alternative 3 impacts. Neighborhoods around SR 181 would have noise and potential displacement impacts greater than Alternative 3; however, overall social impacts would still be low. In Kent, there would be low-level traffic and land use impacts similar to Alternative 3, which would result in low community cohesion impacts; most proposed improvements in Kent would occur away from existing neighborhoods.

Most proposed improvements in the Preferred Alternative would be constructed within the I-405 corridor and along arterials leading to this corridor. Some arterial improvements in the southern corridor area could have social interaction impacts. Social interaction between the neighborhoods within Kent and Tukwila, however, would have a low probability of being affected by these improvements due to the low number of proposed improvements.

Some social interaction impacts might be offset over the long term by the presence of transit stations. The Preferred Alternative would have a level of transit benefits similar to Alternative 3. Stations would be concentrated in Kirkland, Redmond, and Bellevue, offering the greatest benefits to the central corridor area. Stations would also be provided in Bothell, Kent, and Tukwila.

3.15.5 Mitigation Measures

3.15.5.1 Construction

Construction mitigation for the No Action Alternative projects is, or will be, addressed through the environmental analysis, documentation, and review completed for those projects. No additional mitigation measures are necessary.

The action alternatives, including the Preferred Alternative, could have impacts that would be locally or regionally substantial, but none that would require mitigation different in degree or kind than that which is proposed for displacements, traffic, noise, visual quality, and land use to help reduce overall impacts on neighborhoods.

3.15.5.2 Operation

Operations mitigation for the No Action Alternative projects is, or will be, addressed through the environmental analysis, documentation, and review completed for those projects. No additional mitigation measures are necessary.

The action alternatives, including the Preferred Alternative, could have impacts that would be locally or regionally substantial, but none that would require mitigation different in degree or kind than that which is proposed for displacements, traffic, noise, visual quality, and land use to help reduce overall impacts on neighborhoods.